

Notice of Allowability

Application No.

09/518,063

Examiner

Kevin M. Burd

Applicant(s)

ATARIUS ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the after final amendment filed 10/12/2004.
2. ☒ The allowed claim(s) is/are 1,3-10,12-20 and 22.
3. ☒ The drawings filed on 21 April 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Allowable Subject Matter

Claims 1, 2-10, 12-20 and 22 are allowed.

The following is an examiner's statement of reasons for allowance: Hutchison IV, et al (US 5,790,589) discloses a method and apparatus for detecting path rays in a multi-path channel (column 1, lines 35-48). Locations are searched to find the location of a signal. The location of the signal is detected (tracked). If a location is not found after a certain time period, a new search is conducted (abstract). Hutchison does not disclose adjusting multiple time references according to the determined location of the received path rays. Carlson et al (US 6,366,599) discloses using a separate clock signal for the purposes of signal acquisition (searching) from the clock signal that is used for sampling and signal tracking (column 5, lines 12-14). Searching takes place and after the signal has been located (according to the determined location), tracking takes place. The switching from one clock to the second clock is the "adjusting at least one of the multiple time references". It would have been obvious for one of ordinary skill in the art at the time of the invention to utilize the teachings of Carlson in the method of Hutchison. Carlson states, "it is advantageous to use two separate clock signals, because the acquisition circuitry can tolerate a significantly higher phase noise in its clock signal than the sampling and tracking stages can" (column 5, lines 9-28). This combination does not disclose the time references are adjusted according to an amount based on a difference between a probable location and the determined location of a path ray as stated in claims 1, 3-7, 9, 10, 12-16, 18-20 and 22. This combination does not disclose the step

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of calibrating includes averaging measurements of the ratio of clock cycles of the time reference of high accuracy to the clock cycles of the time reference with low accuracy as stated in claims 8 and 17. Phelts et al (US 2002/0101912) (paragraph 0026) and Sourour et al (US 6,560,273) (column 4, lines 21-41) disclose multi-path searching and tracking circuits that search for locations of received path rays and determine the locations of the received path rays but do not contain all the specific limitations recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Burd whose telephone number is (571) 272-3008. The examiner can normally be reached on Monday - Thursday 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin M. Burd
12/3/2004

KEVIN BURD
PRIMARY EXAMINER